

What is claimed is:

1. A method for simulating the driving behavior of vehicles on a test stand in which the engine of the vehicle is coupled on the test stand to an electronically controllable braking apparatus and a first simulation model calculates simulation values of variables which are representative of the driving state of the vehicle in that the reaction of the vehicle to the behavior of the engine and the values of the variables as determined immediately prior thereto are calculated, with at least one evaluation variable  $w$  being calculated on the basis of the values measured on the test stand for measurable variables and engine torque  $M$  and the values calculated therefrom with the simulation model for non-measurable variables, wherein in a further simulation model higher-frequency changes are calculated from variables which are measurable per se and are considered in the calculation of the evaluation variable by superimposing with the actual measured values.
2. A method according to claim 1, wherein the simulation values which are calculated in the first simulation model on the basis of the values for measurable variables which are actually measured on the test are used to trigger the test stand, whereas the simulation values calculated in the further simulation model are used exclusively for the calculation of the evaluation variable, namely in such a way that the values for measurable variables as measured on the test stand are superimposed with the calculated higher-frequency changes.
3. A method according to one claim 1, wherein the engine is controlled by an electronic control device which corresponds to that of the real vehicle and that the control device is supplied with the values for measurable variables as measured on the test stand and with the values for the non-measurable variables as calculated in the first simulation model.
4. A method according to claim 3, wherein the control device is adaptive and that the evaluation variable  $w$  is used for the adaptation.
5. A method for simulating the driving behavior of vehicles on a test stand in which the engine of the vehicle is coupled on the test stand to an electronically controllable braking apparatus and a simulation model calculates simulation values of variables which are representative of the driving state of the vehicle in that the reaction of the vehicle to the behavior of the engine and the values of the variables as determined immediately prior thereto are calculated, with at least one evaluation variable  $w$  being

calculated on the basis of the values measured on the test stand for measurable variables such as engine speed and engine torque  $M$  and the values calculated therefrom with the simulation model for non-measurable variables such as the vehicle speed  $v$  or the like, wherein in the simulation model higher-frequency changes are calculated from variables which are measurable per se and are considered in the calculation of the evaluation variable  $w$  by superimposing with the actual measured values.

6. A method according to claim 5, wherein the values of the variables used for controlling the test stand are subjected to a low-pass filtering.
7. A test stand for simulating the driving behavior of vehicles, with a braking apparatus to which the engine of the vehicle is coupled, with measuring devices for measurable variables and engine torque  $M$ , and with an electronic test stand control device for controlling the braking apparatus in which a first simulation model is stored which calculates simulation values of variables which are representative of the driving state of the vehicle, such that the reaction of the vehicle to the behavior of the engine and the values of the variables determined immediately prior thereto are calculated, with an evaluation unit being provided which on the basis of the values measured on the test stand and the values for non-measurable variables such as vehicle speed  $v$  or the like as calculated therefrom with the simulation model calculates at least one evaluation variable  $w$ , wherein a superimposition unit is provided in which a further simulation model is stored which calculates higher-frequency changes in variables  $n$ ,  $M$  which are measurable per se and superimposes them on the actual measured values in calculating the evaluation variable  $w$ .
8. A test stand according to claim 7, wherein the superimposition unit is adaptive and is used directly for triggering the electronic test stand device and/or the braking apparatus.
9. A test stand according to claim 7, wherein the superimposition unit is provided in the evaluation unit.
10. A test stand according to claim 7, wherein the superimposition unit is provided in the test stand control device.
11. A test stand according to one of the claim 7, wherein an electronic control device is provided for controlling the engine which corresponds to that of the real vehicle and the control device is linked to the test stand control device in order to be supplied with the measured values for measurable

variables and the values as calculated in the first simulation model for non-measurable variables.

12. A test stand according to claim 11, wherein the control device is adaptive and the evaluation variable is used for adaptation.